



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,474	05/05/2006	Hidetoshi Kitanaka	1025260-000107	8996
21839 7590 09/26/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER COLON SANTANA, EDUARDO	
			ART UNIT 2837	PAPER NUMBER
			NOTIFICATION DATE 09/26/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com  
debra.hawkins@bipc.com

## Office Action Summary

Application No.

10/578,474

Applicant(s)

KITANAKA, HIDETOSHI

Examiner

Eduardo Colon Santana

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Detailed Action.

Art Unit: 2837

**DETAILED ACTION**

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on September 22, 2004. It is noted, however, that applicant has not filed a certified copy of the JP 2004-274979 application as required by 35 U.S.C. 119(b).

***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 5/5/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishida et al. JP Patent No. 2003289700 A.

Referring to claims 1 and 3, Ishida et al. discloses a control unit for an induction motor (see figures 1, 2 and respective portions of the specification). Ishida et al. further depicts from figure 2 a control vector section (14), shown in more detailed in figure 1. Furthermore, figure 1, clearly shows a mutual inductance correction section (111) that obtains a correction value of a mutual inductance ( $M^*$ ) based on an error between a torque calculation value calculated

Art Unit: 2837

by using a measure value of a primary current ( $i_d$ ,  $i_q$ ) and a torque command value ( $T^*$ ) generated by a torque command generation section (not shown). Moreover, Ishida et al. discloses that the vector control section controls an induction motor (9) by using circuit constant (i.e.  $R_1$ ,  $L_1$ ,  $R_2$ ,  $L_2$ ) including the correction value of the mutual inductance ( $M^*$ ) in such a manner that the torque generated (motor feedback) coincides with the torque command value ( $T^*$ ). In addition Ishida et al. discloses a secondary resistance set value ( $R_2^*$ ), which is corrected through vector control (see abstract).

***Allowable Subject Matter***

4. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not disclose alone or in combination a vector control apparatus wherein the mutual inductance correction section generates a correction value of the mutual inductance by correcting an initial set value of the mutual inductance, based on a corrected value calculated by using voltage command values, an output angular frequency of an inverter, a primary resistance set value, measured value of the primary current and torque command current.

Art Unit: 2837

**Conclusion**

5. The prior art made of record in form 892 and not specifically relied upon is considered pertinent to applicant's disclosure to further show the state of the art. See in particular Ishida U.S. Patent No. 6,611,124.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon Santana whose telephone number is (571) 272-2060. The examiner can normally be reached on Monday thru Thursday 6:30am - 3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 X.37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information, see <http://pair-direct.uspto.gov>. Should you have questions contact the Electronic Business Center at 866-217-9197. If you would like assistance, call 800-786-9199 or 571-272-1000.



Eduardo Colon Santana  
Patent Examiner  
Art Unit 2837

/ECS/

September 14, 2007